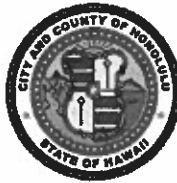


OFFICE OF CLIMATE CHANGE, SUSTAINABILITY AND RESILIENCY
CITY AND COUNTY OF HONOLULU

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March 16, 2020

The Honorable Ikaika Anderson
Chair and Presiding Officer
and Members
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawai'i 96813

Dear Chair Anderson and Councilmembers:

SUBJECT: Bill 25 (2019) – Relating to the Adoption of the State Energy Conservation Code

The Office of Climate Change, Sustainability and Resiliency (CCSR) strongly urges your final passage of Bill 25 (2019), which adopts the State Energy Code, 2015 International Energy Conservation Code (IECC) with added local amendments for electric vehicle (EV) and photovoltaic (PV) "readiness." Specifically, CCSR recommends passage of the proposed FD1 introduced by Councilmember Elefante.

Throughout the ten months since the introduction of Bill 25 at the City Council, there has been broad-based community engagement – predominantly in support of a strong energy code – and discussion of the merits of Bill 25 as it relates to addressing both the cost of living and climate crises facing island residents. The FD1 introduced by Councilmember Elefante before you represents significant compromise and increased flexibility for those with concerns on the bill, while also preserving critical long-term cost of living and climate resilience benefits to the public.

Overall, updating the City's energy code is a foundational and necessary element of the City's commitment to begin to meet the objectives set forth in the Paris climate agreement and strengthening O'ahu's resilience and sustainability in the face of the global climate crisis. The 2015 IECC addresses numerous energy efficiency improvements that will reduce greenhouse gas (GHG) emissions and improve long-term affordability for working families and residents. Adoption of the 2015 IECC via Bill 25 is projected to reduce home energy use by 33%, and these savings will benefit residents and our island environment for the estimated 50-year life of the new construction.

The new optional Tropical Climate Zone track, which was developed in close consultation with the Hawai'i State Energy Office and the International Code Council, allows builders to choose a compliance pathway that is more appropriate for our hot and humid tropical environment. This includes a point system that rewards highly-efficient Energy Star appliances; large lanais and other features that take advantage of natural ventilation and tradewinds; ceiling fans in lieu of whole home air conditioning; and shading, glazing, and reflective surfaces to keep occupants cool. The Tropical Climate Zone option is estimated to save an additional 48% on energy usage beyond the 2015 IECC, and in many cases, reduce building construction costs.

The local amendments to the IECC proposed in the most recent version of Bill 25 include cost-effective EV and PV readiness requirements to ensure that new homes and buildings built on O'ahu are "future-proofed" for the rapidly growing electric vehicle market on O'ahu, and help local residents take advantage of clean, affordable, and abundant solar energy resources. Both readiness requirements will help expand access to solar PV, battery storage, and EVs, and avoid costly expenses to retrofit homes and buildings over the 50-year life of the building when residents and tenants elect to install actual PV panels or EV chargers.

Overall, since Bill 25 was initially introduced, there have been significant compromises made to provide flexibility and address concerns by private industry, including but not limited to:

1. Adding an alternative point system pathway to provide flexibility for individual building sites and projects to comply with EV-readiness;
2. Allowing developers to aggregate EV-readiness across multiple projects;
3. Reducing EV-readiness requirements for retail settings to 20%;
4. Reducing EV-readiness requirements to 20% for homes built for residents with incomes between 100 to 140% of adjusted median income (AMI);
5. Amending language in the renewable hot water heating section to reference existing state law instead of setting a new standard;
6. Adding exemptions for jalousie windows and concrete masonry units that comport with local market conditions and preferences, and save money on construction costs;
7. Relaxing sampling requirements, which lowers construction costs;
8. Accepting a ceiling fan junction box in some living spaces in lieu of an installed fan in production home building; and
9. Adjusting insulation and reflectance requirements for commercial re-roofing projects to lower costs for the roofing industry.

There have also been efforts to accommodate new information and technology that expand access and benefits for island residents via PV and EV infrastructure, including:

1. Adding in rooftop solar-ready provisions for residential buildings; and
2. Amending the baseline charging level across all categories from Level 1 to 2.

The FD1 proposed by Councilmember Elefante offers two important updates to the version of the bill unanimously approved by the Zoning, Planning and Housing (ZPH) Committee on February 27. The FD1:

1. Reinstates a 10% EV-readiness requirement for homes built to serve residents at 100% AMI and below, with a four year delay for compliance to overcome project timeline and design challenges.
2. Revises the points-based compliance pathway table to increase the number of points awarded for installing EV readiness in common area parking stalls; installing physical chargers in addition to the required “ready” infrastructure; and, installing higher level capacity chargers that speed charge times.

Just last month, news reports highlighted that 2019 was Honolulu’s hottest year on record, and the second hottest on record globally.¹ Past building practices have not protected our residents from dangerous climate impacts or achieved long-term affordability. Strong updates to our energy codes are a fundamental public safety and welfare need to ensure that more O’ahu residents have access to cost-saving efficient homes, electric vehicles, and solar energy that help to fight climate change while simultaneously improving long-term affordability for residents.

Following nearly ten months of continued discussion and compromise since the Bill’s introduction in May 2019, Bill 25 is poised for adoption. This administration has supported a robust community input process, and it is clear that O’ahu residents support efforts to update our energy code. Approximately 250 individuals or organizations testified in writing or in-person at the January ZPH Committee hearing with more than 90% providing testimony in support. In a 2019 public opinion poll of voters island-wide, more than eight in ten residents support requiring that new homes are more energy efficient, use solar hot water heaters and are able to charge electric vehicles.² More than seven in ten still support updating energy codes even if it means adding upfront costs to home builders while lowering utility bills for homeowners in the long run.

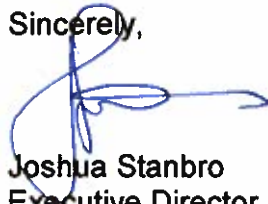
¹ See Hawai’i News Now. It’s Official: 2019 was Honolulu’s Hottest Year on Record. February 19, 2020

² See Civil Beat. Poll: O’ahu Voters Want Action on Climate Change. November 25, 2019

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and Members
March 16, 2020
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Thank you for the opportunity to provide this testimony in support of Bill 25 (2019), FD1 proposed by Councilmember Elefante. Should you have any questions, please contact me at 768-2277 or resilientoahu@honolulu.gov.

Sincerely,



Joshua Stanbro
Executive Director and
Chief Resilience Officer

APPROVED:



Roy K. Amemiya Jr.
Managing Director